

# Fluke 27 II and 28 II: Rugged IP 67 Industrial Multimeters

## **Technical Data**

The **NEW** Fluke 27 II and 28 II digital multimeters define a new standard for operating in harsh conditions with the features and accuracy to troubleshoot most electrical problems. Both meters have IP 67 (waterproof and dustproof) rating, MSHA approvals (pending), extended operating temperature range of -15 °C to +55 °C (5 °F to 131 °F, -40 °C for up to 20 minutes) and 95 % humidity, and have been designed and tested to withstand a 3 m (10 ft) drop. The new Fluke 20 Series Multimeters are built to work in the toughest environments.

- Measure up to 1000 V ac and dc
- Measure up to 10 A (20 A for 30 seconds)
- 10,000  $\mu F$  capacitance range
- Frequency to 200 kHz
- Extended ac voltage bandwidth-15 Hz to 20 kHz (28 II), 40 Hz to 30 kHz (27 II)
- Built in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument (28 II)
- Resistance, continuity and diode test
- Min/Max and average recording to capture variations automatically
- Peak min-max (28 II)
- Unique function for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (28 II)

#### Features

- New IP 67 waterproof & dustproof protection, completely sealed for use in harsh environments
- Designed to withstand 3 meter drop (with holster)

- Hi resolution 20,000 count display mode (28 II)
- True-rms ac voltage and current for accurate measurements on non linear signals (28 II)
- Average responding voltage and current for measurements (27 II)
- **New** Backlit keypad buttons allow for easy visibility in low-lit areas
- Large display digits and 2 level bright white backlight for increased visibility
- Reversible holster for added protection when not in use
- Withstands hazardous 8,000 volt spikes caused by load switching and faults on industrial circuits and complies with second edition IEC and ANSI electrical safety standards
- Long battery life (800 hours)
- Relative mode to remove test lead resistance from low ohms measurements
- Auto and manual ranging for maximum flexibility
- Optional magnetic hanger for easy setup and viewing while freeing your hands for other tasks
- MSHA approval (pending)





#### **Accuracy specifications**

Specification		27 II	28 II
DC weltere	Max. resolution	0.1 mV to 1000 V	
DC voltage	Accuracy	0.1 % +1	0.05 % + 1
AC voltage	Max. resolution	0.1 mV to 1000 V	
	Accuracy	0.5 % +3	0.7 % +4
DC current	Max. resolution	0.1 µA to 10 A	
	Accuracy	0.2 % + 4	0.2 % + 4
AC current	Max. resolution	0.1 µA to 10 A	
AC current	Accuracy	1.5 % + 2	1.0 % + 2
Resistance	Max. resolution	0.1 Ω to 50 MΩ	
Display counts		6000	6000/19,999
Capacitance		1 nF to 9999 µF	
Frequency		0.5Hz Hz to 199.99 kHz	
Temperature		-	-200 °C to +1090 °C
Low pass filter (Measurement on VSD's)		-	Yes
Compliance		CAT IV 600 V , CAT III 1000V	
IP rating		IP 67	IP 67
Power		Three AA batteries	
Battery life		800 1	hours

#### **General specifications**

Display				
Bar graph/backlight	Yes/Yes			
Data storage				
Peak transient capture	250 μS (28 II)			
Min/Max/Avg	Yes			
Reading hold	Yes			
Other features				
Relative readings (zero)	Yes			
Battery type	Three AA batteries			
Warranty and protection				
Safety rating	CAT IV 600 V/CAT III 1000 V			
External protection	Rubber holster			
Drop test	10 feet drop test			
Dustproof/waterproof	Yes, IP 67 rated			
Warranty	Limited lifetime			
Size (HxWxL) with holster	6.35 cm x 10.0 cm x 19.81 cm (2.5 in x 3.93 in x 7.8 in)			
Weight with holster	698.5 g (1.54 lb)			

### **Ordering information**

27 II	Fluke 27 II Rugged IP 67
	Avg. Responding Multimeter
28 II	Fluke 28 II Rugged IP 67
	True-rms Multimeter

**Includes:** Holster, test leads, alligator clips, 80BK-A temperature probe (28 II), manual, CD-ROM, and three AA batteries (installed)

#### **Optional accessories**

PV 350	Pressure Vacuum Module
i200	AC Current Clamp
i410	AC/DC Current Clamp
80K-6	High Voltage Probe



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